## **CLAIMS**

## What is claimed is:

## 1. A damper comprising:

a pressure tube defining a longitudinal axis and forming a working chamber;

a damper piston disposed within said working chamber, said damper piston dividing said working chamber into an upper working chamber and a lower working chamber;

a piston rod attached to said damper piston and extending through said pressure tube;

a rod guide assembly disposed between said piston rod and said pressure tube; said rod guide assembly comprising:

a main housing;

a first seal disposed between a first component of said rod guide assembly and said piston rod;

a second seal disposed between a second component of said rod guide assembly and said piston rod;

a fluid chamber disposed between said first and second seal; and
a guide piston movable with respect to said fluid chamber to vary
the volume of said fluid chamber.

- 2. The damper according to Claim 1 wherein said first component is said main housing.
- 3. The damper according to Claim 2 wherein said second component is said guide piston.
- 4. The damper according to Claim 1 wherein said second component is said guide piston.
- 5. The damper according to Claim 1 wherein said guide piston slidingly engages said main housing.
- 6. The damper according to Claim 5 wherein said first component is said main housing.
- 7. The damper according to Claim 6 wherein said second component is said guide piston.
- 8. The damper according to Claim 5 wherein said second component is said guide piston.
- 9. The damper according to Claim 1 wherein said guide piston slidingly engages said pressure tube.

- 10. The damper according to Claim 9 wherein said first component is said main housing.
- 11. The damper according to Claim 10 wherein said second component is said guide piston.
- 12. The damper according to Claim 9 wherein said second component is said guide piston.
- 13. The damper according to Claim 1 wherein said guide piston slidingly engages a sleeve disposed between said pressure tube and said piston.
- 14. The damper according to Claim 13 wherein said first component is said main housing.
- 15. The damper according to Claim 14 wherein said second component is said guide piston.
- 16. The damper according to Claim 13 wherein said second component is said guide piston.

- 17. The damper according to Claim 13 wherein said sleeve is attached to said main housing.
- 18. The damper according to Claim 13 wherein said rod guide assembly further comprises a retainer disposed between said guide piston and said damper piston, said retainer providing a stop for said guide piston.
- 19. The damper according to Claim 18 wherein said retainer provides a stop for said damper piston.
- 20. The damper according to Claim 18 wherein said retainer abuts said sleeve.
- 21. The damper according to Claim 1 wherein said rod guide assembly further comprises a retainer disposed between said guide piston and said damper piston, said retainer providing a stop for said guide piston.
- 22. The damper according to Claim 21 wherein said retainer is attached to said main housing.
- 23. The damper according to Claim 21 wherein said retainer is attached to said pressure tube.

24. The damper according to Claim 1 further comprising a dust wiper disposed between said rod guide assembly and said piston rod.